

How to Differentiate Instruction in Mixed-Ability Classrooms

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1 What Differentiated Instruction Is—And Isn't

KIDS OF THE SAME AGE AREN'T ALL ALIKE WHEN IT COMES TO learning, any more than they are alike in terms of size, hobbies, personality, or likes and dislikes. Children *do* have many things in common because they are human beings and because they are all children, but they also have important differences. What we share in common makes us human. How we differ makes us individuals. In a classroom with little or no differentiated instruction, only student similarities seem to take center stage. In a differentiated classroom, commonalities are acknowledged and built upon, and student differences become important elements in teaching and learning as well.

At its most basic level, differentiating instruction means “shaking up” what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas, and expressing what they learn. In other words, a differentiated classroom provides different avenues to acquiring content, to processing or making sense of ideas, and to developing products.

In many classrooms, the approach to teaching and learning is more unitary than differentiated. For example, 1st graders may listen to a story and then draw a picture about what they learned. While they may choose to draw different facets of the story, they all experienced the same content, and they all had the same sense-making or processing activity. A kindergarten class may have four centers that all students visit to complete the same

activities in a week's time. Fifth graders may all listen to the same explanation about fractions and complete the same homework assignment. Middle school or high school students may sit through a lecture and a video to help them understand a topic in science or history. They will all read the same chapter, take the same notes, complete the same lab or end-of-chapter questions, and take the same quiz. Such classrooms are familiar, typical, and largely undifferentiated.

Most teachers (as well as students and parents) have clear mental images of undifferentiated classrooms. After experiencing undifferentiated instruction over many years, it is often difficult to imagine what a differentiated classroom would look and feel like. How, educators wonder, can we make the shift from "single-size instruction" to differentiated instruction so we can better meet our students' diverse needs? Answering this question first requires clearing away some misperceptions.

What Differentiated Instruction is NOT

Differentiated instruction is NOT the "Individualized Instruction" of the 1970s.

We were probably onto something important in the '70s when we experimented with what we then called individualized instruction. At least we understood that students have different learning profiles and that there is merit in meeting students where they are and helping them move on from there. One flaw in the '70s approach was that we tried doing something different for all 30-plus students in a single classroom. When each student had a different reading assignment, it didn't take long for teachers to become exhausted. A second flaw was that in order to "match" each student's precise entry level, we chopped up instruction into skill fragments, thereby making learning fragmented and largely irrelevant. While it is true that differentiated instruction offers several avenues to learning, it does not assume a separate level for each learner. It also focuses on meaningful learning or powerful ideas for all students.

Differentiated instruction is NOT chaotic.

Most teachers remember the recurrent nightmare (and periodic reality!) from their first year of teaching: losing control of student behavior. A benchmark of teacher development is the point at which the teacher has become secure and comfortable with classroom management. Fear of losing control of student behavior is a major obstacle for many teachers in establishing a flexible classroom.

Teachers who differentiate instruction quickly point out that, if anything, they exert more control in their classroom, not less. Compared with teachers who offer a single approach to learning, teachers who differentiate instruction have to manage and monitor many activities simultaneously. And they still must help students in developing ground rules for behavior, give and monitor specific directions for activities, and direct the sequence of events in each learning experience. Effective differentiated classrooms include purposeful student movement and some purposeful student talking. They are not disorderly or undisciplined.

Differentiated instruction is NOT just another way to provide homogeneous grouping.

Our memories of undifferentiated classrooms probably include the bluebird, cardinal, and buzzard reading groups. Typically, a buzzard remained a buzzard, and a cardinal was forever a cardinal. Under this system, buzzards nearly always worked with buzzards on skills-focused tasks, while work done by cardinals was typically at "higher levels" of thought. In addition to being predictable, student assignments to groups was virtually always teacher-selected.

A hallmark of an effective differentiated classroom, by contrast, is the use of flexible grouping, which accommodates students who are strong in some areas and weaker in others. For example, a student may be great at interpreting literature, but not so strong in spelling, or great with map skills and not as quick at grasping patterns in history, or quick with math word problems but careless with computation. The teacher who uses flexible grouping also understands that some students may begin a new task

slowly, and then launch ahead at remarkable speed, while others will learn, but more slowly. This teacher knows that sometimes *she* needs to assign students to groups so that assignments are tailored to student need, but that in other instances, it makes more sense for *students* to form their own working groups. She sees that some students prefer or benefit from independent work, while others usually fare best with pairs or triads. In a differentiated classroom, the teacher uses many different group configurations over time, and students experience many different working groups and arrangements. “Fluid” is a good word to describe assignment of students to groups in such a heterogeneous classroom. In the older, “three groups approach” to instruction, student assignment to tasks was more fixed.

Differentiated instruction is NOT just “tailoring the same suit of clothes.”

Many teachers think that they differentiate instruction when they ask some students to answer more complex questions in a discussion or to share advanced information on a topic, grade some students a little harder or easier on an assignment in response to the students’ perceived ability and effort, or let students select which questions to answer or skip on a test. Certainly such modifications reflect a teacher’s awareness of differences in student profiles and, to that degree, the modifications are movement in the direction of differentiation. While they are not necessarily ineffective or “bad” strategies on the teacher’s part, they are a “micro-differentiation” or “tailoring,” and are often just not enough. If the basic assignment itself is far too easy for an advanced learner, having a chance to answer a complex question is not an adequate challenge. If information is essential for a struggling learner, allowing him to skip a test question because he never understood the information is ineffective. If the information in the basic assignment is simply too complex for a learner until she has the chance to assimilate needed background information and skills, being “easier” on her when grading her assignment does not help her in the long run. In sum, trying to stretch a garment that is far too small or attempting to tuck and gather a garment that is far too large is likely to be less effective than getting clothes that are the right fit at a given time.

What Differentiated Instruction Is

Differentiated instruction is PROACTIVE.

In a differentiated classroom, the teacher assumes that different learners have differing needs. Therefore, the teacher proactively plans a variety of ways to “get at” and express learning. He still needs to tailor or fine-tune instruction for individual learners, but because different learning options are available based on his knowledge of varied learner needs, the chances are greater that the learning experiences will provide an appropriate fit for many learners.

Differentiated instruction is more QUALITATIVE than quantitative.

Many teachers incorrectly assume that differentiating instruction means giving some students more work to do, and others less. For example, a teacher might assign two book reports to advanced readers and only one to struggling readers. Or a struggling math student might have to do only the computation problems while advanced math students do the word problems as well. Although such approaches to differentiation may seem to have an adequate rationale, they are typically ineffective. One book report is too much for a struggling learner without additional support in the process of reading as well as interpreting the text. Or a student who could act out the substance of the book effectively might be overwhelmed by writing a three-page report. If writing one book report is “too easy” for the advanced reader, doing “twice as much” of the same thing is not only unlikely to remedy the problem, but it could also seem like punishment. A student who has already demonstrated mastery of one math skill is ready to stop practice related to that skill and begin practice in a subsequent skill. Simply adjusting the *quantity* of an assignment will generally be less effective than adjusting the *nature* of the assignment to match student needs as well.

Differentiated instruction provides MULTIPLE approaches to content, process, and product.

In all classrooms, teachers deal with at least three curricular elements: (1) content—input, what students learn; (2) process—how students go about making sense of ideas and information; and (3) product—output, how students demonstrate what they have learned. These elements are so important in differentiating instruction that they are dealt with in depth in Chapters 8, 9, and 10. By differentiating these three elements, teachers offer different approaches to *what* students learn, *how* they learn it, and *how* they *demonstrate what they've learned*. What these different approaches have in common, however, is that they are crafted to encourage substantial growth in all students.

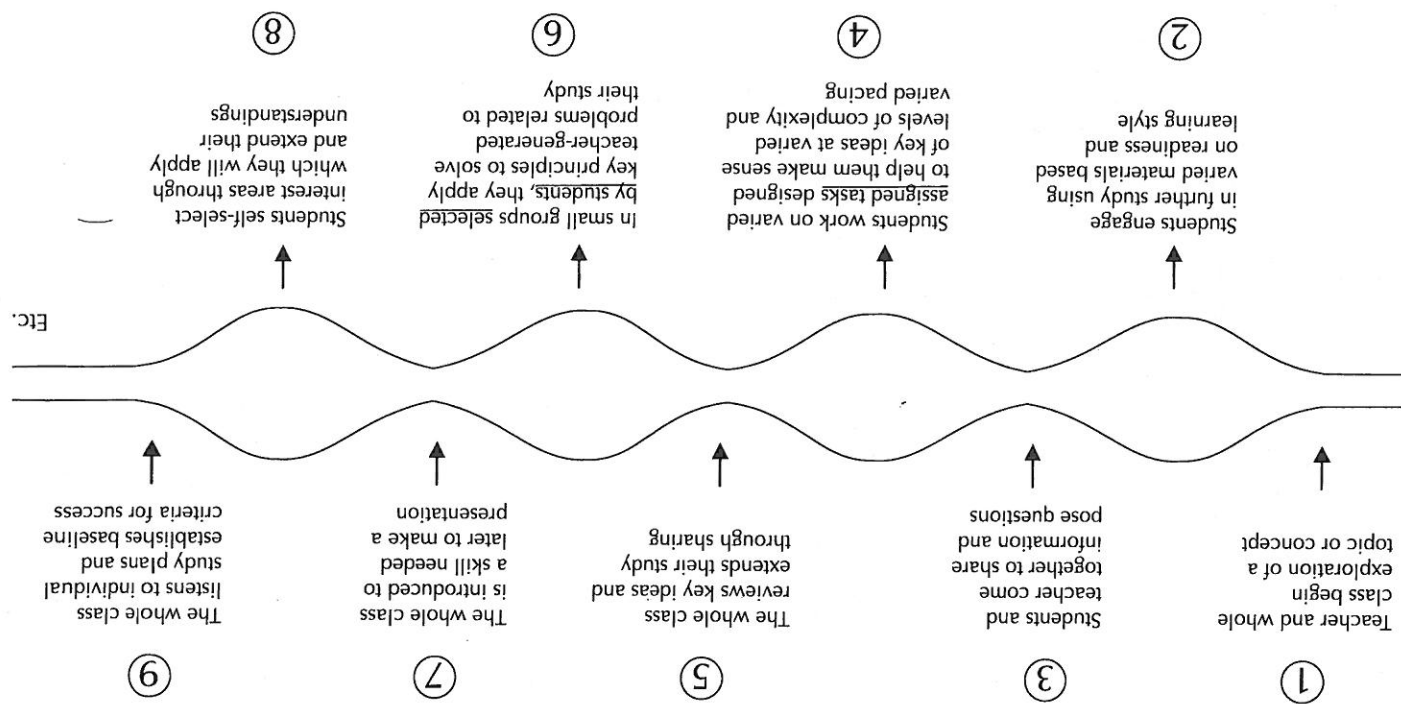
Differentiated instruction is STUDENT CENTERED.

Differentiated classrooms operate on the premise that learning experiences are most effective when they are engaging, relevant, and interesting. A corollary to that premise is that all students will not always find the same avenues to learning equally engaging, relevant, and interesting. Further, differentiated instruction acknowledges that later understandings must be built on previous understandings and that not all students possess the same understandings at the outset of a given investigation. Teachers who differentiate instruction in mixed-ability classrooms seek to provide appropriately challenging learning experiences for all their students. These teachers realize that sometimes a task that lacks challenge for some learners is frustratingly complex to others.

Differentiated instruction is A BLEND of whole-class, group, and individual instruction.

There are times in all classrooms when it is more effective or efficient to share information or use the same activity with the whole class. Such whole-group instruction establishes common understandings and a sense of community for students by sharing discussion and review. As illustrated in Figure 1.1, the pattern of instruction in a differentiated classroom could be represented by mirror

FIGURE 1.1
The Flow of Instruction in a Differentiated Classroom



images of a wavy line, with students coming together as a whole group to begin a study, moving out to pursue learning in small groups or individually, coming back together to share and make plans for additional investigation, moving out again for more work, coming together again to share or review, and so on.

Differentiated instruction is "ORGANIC."

In a differentiated classroom, students and teachers are learners together. While teachers may know more about the subject matter at hand, they are continuously learning about how their students learn. Teachers assess students' readiness in a variety of ways and then design learning experiences based on their best understanding of students' needs and interests. Ongoing collaboration with students is necessary to refine the learning opportunities so they're effective for each student. Differentiated instruction is dynamic: Teachers monitor the match between learner and learning and make adjustments as warranted. And while teachers are aware that sometimes the learner/learning match is less than ideal, they also understand that they can continually make adjustments. Differentiated instruction often results in more effective matches than does the mode of teaching that insists that one assignment serves all learners well.

A New Image to Keep in Mind

As you continue reading about how to differentiate instruction in mixed-ability classrooms, keep this new image in mind:

In a differentiated classroom, the teacher plans and carries out varied approaches to content, process, and product in anticipation of and response to student differences in readiness, interest, and learning needs.

The practical strategies in this book should crystallize this new image for you as you work at differentiating instruction in your classroom.

7 The How-To's of Planning Differentiated Lessons

EXPERT TEACHERS OFTEN DO THE EQUIVALENT OF "PLAYING BY EAR" when they differentiate instruction in their classrooms. That is, they simply do what seems right for their students. Generally, intuition begins the process, and over time teachers learn from their successes and failures, refining what they do as they go along. Thus when we ask teachers how they plan a differentiated lesson, their answers are often a bit vague: "I just try to match the tasks to the students' readiness level," or "I try to involve the students in planning with me," or "I put them in groups I think will work."

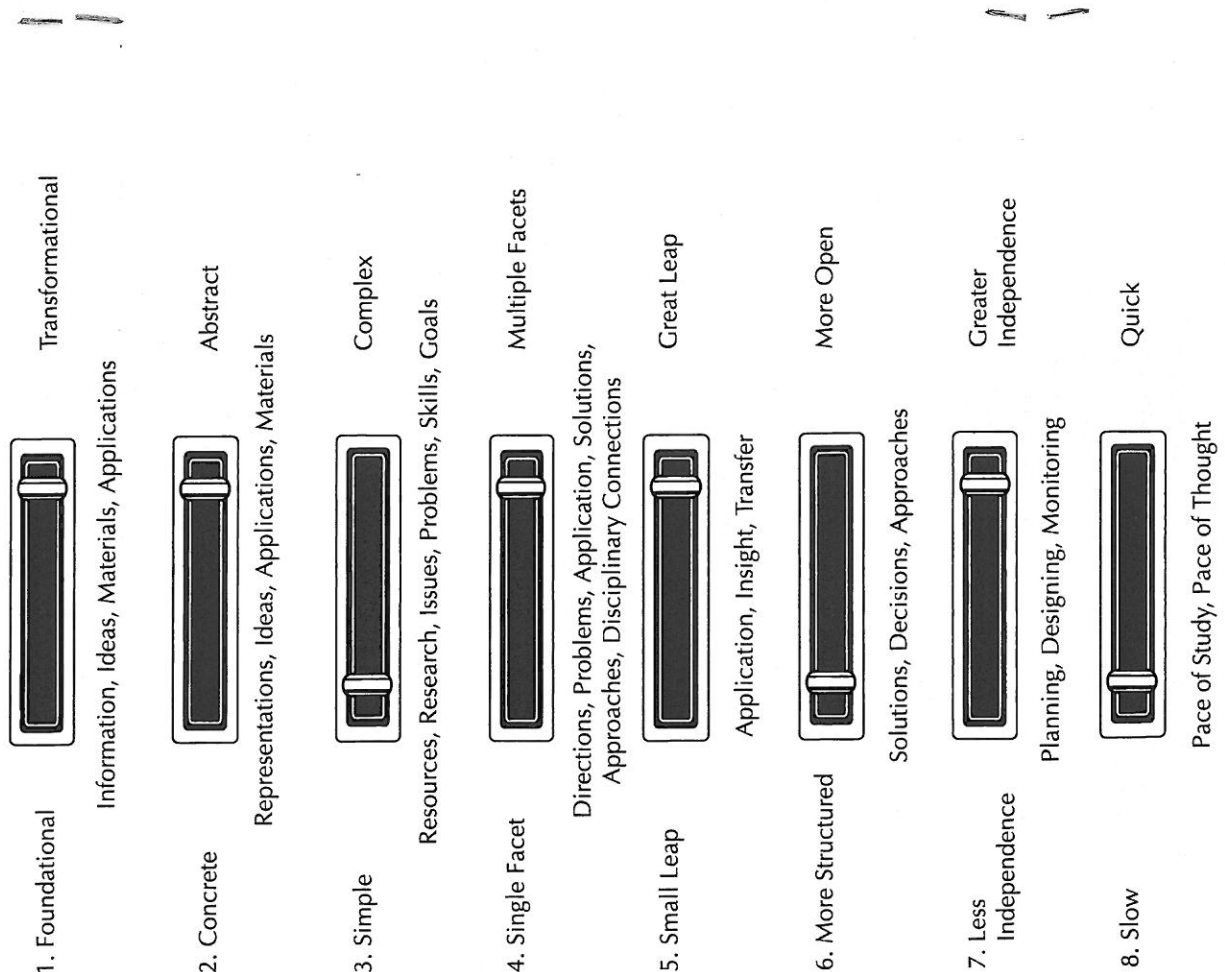
Thinking About Differentiation

To differentiate instruction in your classroom successfully, it helps to have a comprehensive guide for planning and monitoring the effectiveness of differentiated curriculum lessons. One way to get specific guidance about what teachers do when they create differentiated lessons is to study those lessons and discover what makes them differentiated. We can also learn much by asking "What supports the instinct to differentiate instruction?" Figure 7.1 is an answer to that question—derived from looking at many examples of differentiation. I call the tool in this figure "the equalizer."

FIGURE 7.1
The Equalizer: A Tool for Planning Differentiated Lessons

Designing differentiated instruction is similar to using the equalizer buttons on a stereo or CD player. You can slide the buttons across several different continuums to get the best combination of sounds for each musical piece. In a differentiated classroom, adjusting the “buttons” appropriately for various students’ needs equalizes their chances of being stimulated and challenged by the materials, activities, and products in your classroom.

- **Foundational to Transformational.** When an idea is new to some students, or if it’s not in one of their stronger areas, they often need supporting information about the idea that is clear and plainly worded. Then they usually need time to practice applying the idea in a straightforward way. In these instances, the materials they use and the tasks they do should be foundational—that is, basic and presented in ways that help them build a solid foundation of understanding. At other times, when something is already clear to them or is in a strength area, they need to move along quickly. They need information that shows them intricacies about the idea. They need to stretch and bend the idea and see how it interacts with other ideas to create a new thought. Such conditions require materials and tasks that are more transformational. For example, one child may benefit from a more basic task of classifying animals by body covering, while another may need the more transformational task of predicting how changes in environment would likely affect the body covering of several animals. In a math class, one young learner may be ready for a basic application of the concept of fractions by cutting fruit and placing it to reflect a given fraction. An appropriate challenge for another student may be the more transformational task of writing measures of music that represent certain fractions.
- **Concrete to Abstract.** Students usually need to become familiar with the key information or material about an area of study before they can successfully look at its implications, meanings, or interrelationships. However, once they have grasped the information in a concrete way, it’s important that they move on to meanings and implications. Working with concrete information should open a door for meaningful abstraction later on. For example, grasping the idea of plot (more concrete) typically



has to precede investigations of theme (more abstract). But ultimately, all students need to delve into meanings of stories, not just the events. The issue here is readiness or timing.

- **Simple to Complex.** Sometimes students need to see only the big picture of a topic or area of study, just its “skeleton,” without many details. Even adults often find it helpful to read a children’s book on black holes, for example, before they tackle the work of Stephen Hawking. When the big picture is needed, your students need resources, research, issues, problems, skills, and goals that help them achieve a framework of understanding with clarity. On the other hand, when the “skeleton” is clear to them, they’ll find it more stimulating to add “muscle, bone and nerves,” moving from simple to complex. Some students may need to work more simply with one abstraction at a time; others may be able to handle the complexity of multiple abstractions. For example, some students may be ready to work with the theme in a story (a single abstraction), while other students look at interrelationships between themes and symbols (multiple abstractions, or complexity).

- **Single Facet to Multiple Facets.** Sometimes students are at peak performance when working on problems, projects, or dilemmas that involve only a few steps or solutions to complete. It may be all that some students can handle to make a connection between what they studied in science today and what they studied last week. Those with greater understanding and facility in an area of study are ready for and more challenged by following complicated directions. They are more challenged by solving problems that are multifaceted or require great flexibility of approach, or by being asked to make connections between subjects that scarcely seemed related before.

- **Small Leap to Great Leap.** Note that this continuum does not provide the option of “no leap.” Students should always have to run ideas through their minds and figure out how to use them. Activities that call only for absorption and regurgitation are generally of little long-term use. But for some students, learning about how to measure area and then applying that learning by estimating and verifying the area of the hamster house compared to the teacher’s desk

may be enough of a leap of application and transfer—at least in the beginning. Other students may be able to move from estimating and verifying area to estimating materials needed for a building project and proportional cost implications of increasing area. In both cases, students make mental leaps from reading information on a page to using that information. The latter task calls for relatively greater leaps of application, insight, and transfer.

- **Structured to Open-Ended.** Sometimes students need to complete tasks that are fairly well laid out for them, where they don’t have too many decisions to make. Novice drivers begin by managing the car on prescribed driving ranges or delineated routes. Being new to a computer or word processor often requires completing programmed and closed lessons that involve “right” answers to become knowledgeable—and comfortable—with basic operation and keyboarding before moving on to more advanced and open-ended tasks such as selecting varied uses of graphics to illustrate ideas in a formal presentation. Following a predetermined format for a writing assignment or a chemistry lab often makes more sense than improvisation. At other times, however, students are ready to explore the computer, craft their own essays designed to address a communication need, or create a chemistry lab that demonstrates principles of their choosing. Modeling helps most of us become confident enough to eventually “wing it.” But when modeling has served its purpose, it’s time to branch out and get creative.

- **Dependent to Independent.** A goal for all learners is independent study, thought, and production. But just as some students gain height more quickly than others, some will be ready for greater independence earlier than others. Their needs in developing independence generally fall into one of these four stages:

1. *Skill building*, when students need to develop the ability to make simple choices, follow through with short-term tasks, and use directions appropriately.
2. *Structured independence*, when students make choices from teacher-generated options, follow prescribed time lines, and engage in self-evaluation according to preset criteria to complete longer-term and more complex tasks.

3. *Shared independence*, when students generate problems to be solved, design tasks, set time lines, and establish criteria for evaluation. The teacher helps “tighten” or focus the plans and monitors the production process.

4. *Self-guided independence*, when students plan, execute, and evaluate their own tasks, and seek help or feedback only when needed (Tomlinson 1993).

By guiding students across this continuum at individually appropriate speeds, you and your students are less likely to become frustrated by tasks that require greater independence.

• **Slow to Fast.** Of all the continuums, this one is the most likely to require some “jumping around.” There are times when students with great ability in a subject need to move quickly through familiar or minimally challenging material. But at other times, some of those same students will need more time than others to study a topic in depth. You can adjust the speed of learning experiences for students who are struggling with key ideas by allowing them to work more slowly at first, but then letting them move quickly through tangential areas of study, thus freeing up some time for further work with the key ideas. Matching pacing to your students’ needs is a critical differentiation strategy.

Like the equalizer buttons on audio equipment, it’s possible for the teacher to design lessons by “moving the buttons” on this guide to different positions for the needs of varied students. For example, some students may be able to handle a complex, abstract, multifaceted project (buttons over to the right) if you keep the “independence” button toward the left; that is, require more “check-in” dates of them than you require of more self-guided students working on that same project.

Equalizer Troubleshooting Tips

When using the heuristic guide in Figure 7.1 to modify lessons for a differentiated classroom, keep in mind three essential caveats:

1. All students need lessons that are coherent, relevant, powerful, transferable, authentic, and meaningful. We

should not consign some students to drill and practice as the staple of their school diets and save the rich and engaging lessons for others.

2. A curriculum that is good for students pushes them a bit beyond what they find easy or comfortable. Our best teaching happens when we give students a genuine challenge and then help them successfully meet it. Differentiated instruction is so powerful because it offers various levels of genuine challenge. Your students’ sense of self-efficacy comes from recognizing their power after accomplishing something they first thought was just “too big” for them. Design your lessons to stretch all students beyond their comfort zones in knowledge, insight, thinking, basic skills, production and presentation skills, and affective awareness.

3. Plan to encourage your students to “work up”—that is, be ready to match students to tasks that will stretch them. A good task for a given student is one that is just a bit too hard and through which the teacher ensures the presence of support required for success. We err most often as teachers by planning a single task that is easy enough for most students to complete. That has the effect of establishing both “middling” or low expectations for many learners and expectations still out of the reach of others. A task is challenging for a given student when it causes that student to stand on “mental tip toes” and reach high to complete it well.

This guide for differentiating instruction gets at the heart of what many teachers do when they adapt instruction for varied learner needs—albeit automatically. Use this guide when differentiating content (what you teach and what students learn), process (how students think about or make sense of ideas and information), and product (how students show what they know). Add other continuums and descriptors to this guide as your students teach you more about how to differentiate instruction.